

What is claimed is:

1. An apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube comprising:

5 a grill type mask assembly having a frame and a mask;  
a damper spring comprising a first metallic layer and a second metallic layer, said damper spring having a first end and an opposing second end, wherein said second end is coupled to said frame; and

10 a tab formed on said damper spring and adapted to accept said damper wire that traverses the mask.

15 2. The apparatus of claim 1, wherein said first metallic layer is a different material than said second metallic layer.

3. The apparatus of claim 1, wherein said first metallic layer comprises carbon steel.

20 4. The apparatus of claim 1, wherein said second metallic layer comprises stainless steel.

25 5. The apparatus of claim 1, wherein said first metallic layer is disposed on an inner surface of said damper spring for allowing the damper spring to curl inward and unload the damper wire during high temperature processing.

30 6. The apparatus of claim 1, wherein said second metallic layer is disposed on an outer surface of said damper spring for allowing the damper spring to exert tension on the damper wire during normal operating temperature.

35 7. The apparatus of claim 1, wherein the first end of the damper spring is structured having a curvature perpendicular to the first end of the damper spring, for

allowing the damper wire attached to the tab to have a controllable elevation with respect to the mask.

8. The apparatus of claim 1, wherein the damper wire is coupled between the tab and the damper spring by welding the damper wire to the tab and the damper spring.

9. The apparatus of claim 1, wherein said damper wire is coupled to the tab by looping the damper wire around the tab and wedging the damper wire in a crotch between the tab and the damper spring.

10. Apparatus for retaining a damper wire proximate a grill type mask assembly in a cathode ray tube comprising:

a mask assembly having a frame and a mask;

a damper spring comprising a first end having a curvature and an opposing second end, wherein said second end is coupled to the frame, the first end having a curvature aligned with an edge of the mask for adjustably defining an elevation level of the damper wire with respect to the mask.

11. A grill type mask assembly in a cathode ray tube, comprising:

a frame;

a mask, including strands, disposed within said frame;

and

a damper spring coupled to said mask including a portion formed by a first layer having a first coefficient of thermal expansion coupled to a portion formed by a second layer and having a different coefficient of thermal expansion for varying a tension in said damper spring to compensate for changes induced by corresponding changes in temperature within said cathode ray tube.

12. The apparatus of claim 11, wherein said first and second layer are coupled to form a bi-metal arrangement.

13. The apparatus of claim 11, wherein a damper wire that traverses the mask is coupled to said first and second layers that compensate for a change in a length of said damper wire induced by temperature changes.

14. The apparatus of claim 13, wherein a tab is formed on said damper spring and adapted to accept said damper wire.

15. A method of attaching a damper wire to a mask assembly of a cathode ray tube, comprising:

looping the damper wire between a tab and a damper spring that is attached to the mask assembly; and

securing said looped wire in a crotch between the tab and the damper spring.